VOLUME XXXVII, No. 8 APRIL 11, 1940

THE JOURNAL OF PHILOSOPHY

PRINCIPIA NON-MATHEMATICA

THERE are two kinds of principles in Newton's work, first, the non-mathematical principle that was his acceptance of the behavior of material bodies in motion in relation to one another as uncaused, and second, the mechanical principles, capable of mathematical treatment, to which he was led by his mere acceptance of the facts relevant to mechanics. (I am not suggesting that this after-the-event account describes the manner of his reasoning.) The first-mentioned principle might be put: there are bodies which "gravitate." The mechanical principles simply describe the behavior of such bodies in terms of motion, mass, space, and time. That, at least, is the view which Sir Arthur Eddington takes—the earth moves round the sun "anyhow it likes"—and though it may be doubtful whether Eddington is logically entitled to hold this view of the mechanical principles along with his other scientific views, it is the right one, in my opinion. It is the natural corollary to the procedure of merely accepting—after selecting—the facts relevant to mechanics, and that procedure, which led Newton to the right special principles for mechanics, is, I submit, the right general principle for all the sciences.

I arrived at this view of the right general principle for science —and at Eddington's interpretation of the special principles of mechanics—by a route which seems at first sight more different from Newton's and Eddington's than it is, namely, by my dissatisfaction with the "conscious subject" as a *vera causa* and in my search for a more satisfactory account of sentient behavior. The resemblance may be brought out by saying that it was Galileo's dissatisfaction with the concept of "weight" as a *vera causa* in mechanics that led in due course to Newton's concept of "mass"; that is to say, the dissatisfaction in both cases is with "subjectivism" in science. The resemblance is further brought out in the respective issues in the two cases. Newton just accepted the fact that there are bodies which "gravitate" and described the behavior of "gravitating"; I just accepted the fact that there are organisms which are "sentient"—and others which are "rational" —and regarded psychologists as describing these modes of being and behavior. The difference in the two cases is that good descrip-

tive mechanics dates from Newton while there has doubtless been much good descriptive psychology since men began to talk. It required Newton to distinguish the concept of "mass" from the experience and the concept of "weight," but men began to talk about "knowing," "feeling," and "doing" as soon as they began to talk at all, and in doing so they were using the right special concepts for psychology. For the vice of subjectivism—or rather "objectivism" applied to the subject—in psychology we need not go back to the earliest views held as to the nature of the soul; we can simply point to the present state of psychology, which is far from having set its scientific house in order by substituting "conscious subject" for "soul." Psychology will not be placed on its proper scientific basis until psychologists just accept the fact that there are sentient organisms whose sentient behavior is not adequately described without psychological terms, but also whose sentient behavior is not causally explained with psychological terms, any more than the behavior of material bodies is causally explained by the "theory of gravitation."

Reflection on the nature of the sentient behavior of sentient organisms, regarded as organisms but of a special type that occurred in the course of evolution, led me to regard their sentient behavior as "habitual" in a large sense of the word. I considered the sentient behavior—of a mouse, as a matter of fact, running away from a cat—while neglecting the psychological description of it in favor of the physical and physiological description of the whole event, and I found it necessary to make as paradoxical an assumption as Newton made in his First Law. I found that I could not get my mouse into action; so I just assumed that a "mouse" is all the characteristic activity of a "mouse," and that this activity, physiological and psychological, is conditioned by past history, individual and racial. An organism, that is to say, sentient or non-sentient, is an instance of the habit of a kind. The mouse runs away from the cat "because" mice do run away from cats—the "because," it will be observed, is otiose. I just accept the fact that there are mice, and I allow the necessity of psychological terms for an adequate description of their sentient behavior, as such; the description of the sentient behavior of a mouse as the "habit of its kind, modified by its own history," is true but not "informing" in the peculiarly "scientific" manner. That there are organisms of sentient habit is a non-mathematical principle like "there are things of gravitative habit." Similarly, there are organisms of the non-sentient and of the rational type of living habit, the former to be distinguished in explicit scientific principle from merely physico-chemical activity, the latter from

merely sentient activity. If we add the extra-chemical habit of atoms, the gravitative habit of gross material bodies and the being-habits of heavenly bodies, we have a sufficiently inclusive list, in the present state of science, of the "things," the systems of activity, whose habits of being and behavior demand each its own special principles for its adequate scientific description. That is to say, there are a number of sets of principles co-ordinate in value with Newton's mechanical principles, a number of non-mathematical principles corresponding to his "there are bodies which 'gravitate.'" But this pluralism is only scientific, and special-scientific, giving way to the general scientific principle that "nature is habit" or, in terms reminiscent of Newton's First Law, that "the process of nature proceeds."

The reader probably thinks that I am deceiving myself, mistaking the use, or rather, uses, of a word for the synthesis of scientific knowledge, much as if one (in the nursery) should be content with the universal causal account "it is their 'nature' to." If I admit that this opinion would be very natural and pardonable, I hope that the reader, on his side, will make an effort to understand what I mean by "habit,"—the general concept and the special concepts. An effort is required of him, for he must adopt a mental point of view somewhat strange to him.

I begin with the general concept of habit in spite of the fact that I approached it myself by way of the special concepts involved in regarding life and sentient life as (modes of) habit. The general concept of habit, applicable to all the modes of habit, is that all "things," systems of scientifically specifiable activity, are manifestations of an Activity unspecifiable scientifically, and that the behavior of all things is misinterpreted when interpreted either in terms of efficient or of final cause—though these interpretations have been moderately convenient for the purposes of physical science and of psychology, respectively. But there is something in the habit of all things which does correspond to both notions—hence the moderate convenience. All things in their behavior are both relatively "conditioned" and relatively "free"—intrinsically free. What is meant by "relatively conditioned" and "relatively free" can not be indicated apart from the notion of habit itself; their meanings are dependent on the notion of habit; the meaning of "habit" is not dependent on, constructed by combining, notions of "conditionedness" and "freedom" supposedly intelligible in themselves. One can point to what is meant by "relative conditionedness" and "relative freedom" in most of the specific modes of habit. In the case of the gravitative habit of material bodies and the chemical habit of atoms, the element of freedom in the

behavior of the things concerned is reduced to the point of invisibility to scientific observation—physical accounts of atomic structure and behavior in chemical actions are not "chemistry" any more than physiological accounts of sentient behavior are psychology—but organisms and atoms exhibit the appearance both of conditionedness and of freedom, appearances which the mentalistic monist and the materialistic monist have to explain away, respectively. The monism of "nature as habit" accepts both appearances as veridical, and is thus required to qualify the conditionedness and the freedom as relative. There is neither conditionedness absolutely, that is, (efficient) causality, nor freedom, absolutely—for "created" things.

The expression "monism of 'nature as habit' " must be understood in the light of the foregoing: "nature as habit" implies that all things, instances of specific modes of habit, are manifestations of One Activity—*that* is the monism of "nature as habit." It is not the word "habit," that is to say, that sums up the monism of "nature as habit." "Habit" is a concept, a scientific fiction in all its modes, implying that the created reals, from atoms to man, are both conditioned and free, and that the real essence of them all is an Activity of an order beyond our understanding. The reader is probably surprised to see the *Deus ex machina* appear so early in the action, but if so, it is because he has not realized where the action of the play takes place, or rather that in this case any "where" is out of the question. Science does not get nearer reality in proportion as it "explains," as it thinks, the "higher" or "later in evolution" in terms of the "lower" or "earlier in evolution"; "energy" is as much a scientific fiction as "mind." This is the scientist's fallacy, rooted in the spatio-temporal scene of nature's action as he conceives it and the only effective way to deal with it is to explain away his scenery.

Roughly, knowledge has improved in scientific value in proportion as it has become less subjectivistic; (conversely, it has deteriorated in what one may call humanistic value—omelettes are not made without breaking eggs; but the values which modern science has scrambled can be unscrambled.) Newton's description of the behavior of material bodies was less subjectivistic than that, founded on the concept of "weight," which it displaced but it left a great deal of unsuspected subjectivism in mechanics and the other sciences. The subjectivism is unavoidable, as much for science as for sense, but we ought to be aware of it. Sense-experience has long been regarded as phenomenal, but science is still in a stage of what may be called "naïve realism of the understanding," which mistakes concepts like "mind," "matter," "energy," as symboliz-

ing reals. Physicists, it is true, are becoming suspicious that some of their most baffling "problems" are pseudo-problems raised by the subjectivism of science, but they seem to think that the present subjectivism of science is as incurable as the present subjectivism of sense-experience. The proper parallel is between the present naïve realism of the scientific understanding and the former naïve realism of reflection on experience in general. Men grew out of the latter and they can grow out of the former. We have been growing out of it for four hundred years and with the appearance of behaviorism in the study of man and of atoms we should be ready for an intellectual revolution in our concept of nature. Behaviorism, as psychology, is nonsense, of course, but behaviorism as scientific method is a very different matter. When we have "seen"—imagined—ourselves non-subjectively, as organisms of a certain habit, conditioned and free, we are logically entitled to conceive all other things on that model, each with its own type of conditionedness and of freedom. It is only necessary to take the abstractness of the "conscious subject" seriously to see that "mass," "space," and "time" are also abstractions. All the contradictions between the sciences—and *within* the sciences—are seen to arise from fictions mistaken for facts. Nothing is lost of good "scientific knowledge" when we give up the familiar explanations that do not explain and something very important is gained with the new intellectual humility, the new mysteriousness of "nature." Science, so long at odds, and rightly so, with revealed religion in its dogmatic aspect, now brings us up to the threshold of eternity, a timeless and spaceless concept of "nature," the concept of an activity of eternal generation.

I have discussed the general concept of habit before the one that first occurred to me because one can no more discuss the sentient and other living modes of habit than the gravitative mode without using or implying the terms "space" and "time"—not to mention "cause," so inter-dependently involved with them—and it seemed better to assert their status as fictions before rather than after using them. My first concept of the sentient mode of habit was that of a "tendency of action to be repeated because it has occurred before." The reader will remember that I had no "conscious subject" to initiate habits by its fiat and so was compelled to assume that the action in the first place just "happened." Very little reflection, however, sufficed to suggest to a mind already sceptical of the (ultimate) convenience of some fictions—for example, "mind"—that the proposition that "action tends to be repeated because it has occurred before" was more a definition of "time" and of "cause" than of "habit" and showed the relation

of those fictions to the ultimately more convenient fiction of habit, the general concept. If we think of the process of nature as having a direction, as we must in most scientific thinking—we can get nowhere in science with "eternal generation"—it is the process which gives "Time's arrow" its direction, not the reality of time which makes nature a "process." It is not "the great thing about time," as Sir Arthur Eddington says, "that it goes on." That is the great thing about us—and atoms and stars and all other things whose being and behavior make up the process of nature. The direction in which we form our "habits," in the plain man's sense, live our lives, is the direction of "Time's arrow," but neither we nor anything else needs a real time to live in and through. It is consequently only in the biological context that it is true, as true as anything in science need be, that action tends to be repeated because "it" (a similar action) has occurred before. In this context, which is simply descriptive, not explanatory, "cause" and "time" are convenient fictions like the "conscious subject" in the psychological context.

This biological truth—a paradox, of course, at present—is strikingly different from normal scientific truths, such as that material bodies approach one another according to the Newtonian formula and that I willed to write this sentence. These two propositions envisage conditionedness from a "cross-section of duration," or rather, of "process," point of view; the biological truth envisages in addition the "longitudinal" section view, adds temporal to spatial "conditionedness." But when our eyes have been opened to what ought to have been obvious since Darwin, namely, the four-dimensional conditionedness of living things, it is a short step to the assumption of the four-dimensional conditionedness of all things and their behavior. The snow-flakes which I now see "gravitating" would not be doing so if recent meteorological history had been different, just as I should not have written the sentence I spoke of "willing" if the history of the last four hundred years—and my own—had been sufficiently different. The planets have their stations and keep them, more or less, in virtue of their history, and so on. The nature or habit of *all* things is according to their history. From the *scientific* point of view, which is convenient fiction, it should be remembered, the process of nature is a *historical* process. The moving finger of eternity "writes *history*"—events, not records—so it seems to us, trying to understand the mystery of creation.

This may seem to be a platitude now that the theory of evolution is accepted and applied in all the sciences. But evolution has not been accepted as "history" in the sense in which historians use

the word. Science has adopted "evolution," cosmic, organic, etc., into its own mechanical concept of nature, *calling* it a "historical" process but without the slightest suspicion that the concept of a historical process is inconsistent with the mechanistic concept of nature. The two concepts are in flat contradiction. One or the other is false. Both may be false, of course, but to accept both is to make nonsense—even if we dignify the contradiction with the name of "dialectical." If everything is caused, what we call history is a delusive appearance; if everything evolves in a historical process, all things having their respective degrees of intrinsic freedom, causality is a delusive appearance. When we see that these are alternatives, the choice makes itself. If we know anything by experience, and the essence of science is its empiricism, we know that we are free; we are aware of our freedom "from the inside," so to speak, and that freedom is the essence of the "historical" character of ordinary history. Again, the assumption of the truly historical nature of organic evolution delivers the biologist from the impossibilities of mechanism and the improbabilities of vitalisms—other than the form of vitalism which merely accepts the fact that there are living things. Lastly, the facts of modern physics make the concept of causality more and more suspect in inanimate nature, its former stronghold, and reduce it to the status of a pious opinion—for those physicists who think it piety; and indeed it is piety, for piety is what is owed to tradition, custom, habit. A time comes, however, when the old faith must give way to a heresy.

Here I will again warn the reader against the misconception that readily arises from a discussion of the specifically living mode of habit. It is we who imagine a direction for the process of nature, who find it "intelligible," as we think, so regarded. This is delusion, a naïvety of the understanding, even when our interpretation of history is the truly historical, not the mechanistic, one. The notion of four-dimensional conditionedness is indispensable for the adequate description of living things (and it suggested the word "habit") but the fundamental account of "habit" in the case of living things as in the case of all other things is that they are free at every moment—not only when they are acting in a novel way—and conditioned at every moment—not only when they are not acting in a novel way. They are free in their nature, that is, in their conditionedness, and their freedom is as little their own as their conditionedness, as little, that is, of their own making, though it is theirs by endowment, so to speak. They are to be regarded *sub specie aeternitatis,* their nature timeless, their freedom the moving finger of the Eternal. It may clarify, or at least familiarize, the notion of the "habit of the kind" as eternal if I compare

it to the Platonic "idea," but whereas Plato's created things derived their reality from the "idea," the truly real, the "habit of the kind" is admittedly an abstraction, an "idea" in the modern sense. We get our idea of a species from its instances. The reality of created things is derived, of course, but not from the "habit of their kind." All "created" things are free as individuals, but their "createdness" is conditionedness.

Organic evolution as a historical process is more like the theory of "special creation" than like the view of evolution which displaced the latter, for mechanistic evolution leaves out the specific freedom of living things, which is the very essence, the *sine qua non*, of evolution—the process, not the theory; biologists can, and do, assume evolution without it, on a mechanistic basis, but they are not logically entitled to do so. Of that freedom, as of all freedoms, as I have insisted *ad nauseam*, there is no scientific account, and where that is lacking, as in ordinary history, Providence is readily called in, if only as a manner of speaking. I am far from suggesting that biologists or historians should relax anything of the rigor of their demand for a "logic" in events, but I do suggest that the mechanistic "logic" hampers the biological historian. The failures of orthodox evolution theory are as conspicuous as its successes and its successes are very obviously correlated with a high degree of *common* conditionedness in the "morphological habits" concerned. The wide variations from fishes to mammals and birds, for instance, are variations *within* a common morphological habit. The same is true of other phyla and all the phyla, for orthodox evolutionists, are like Melchisedec—they are without descent. Here too, then, is a kind of special creationism, for the mechanistic evolutionist creates an ancestral vertebrate, mollusc, echinoderm, etc., etc., out of his own imagination, compensating by the freedom of his invention for the lack of specifically living freedom in the process of organic evolution as he conceives it. But if we allow to living things some of that freedom of which the freedom of the imagination is a variety, if, that is to say, we do not cramp our imaginations as to the possibilities in the history of organic evolution by assuming it to be a mechanical process, it is not difficult to imagine a plausible origin for vertebrates, for instance. Indeed, it leaps to the eye, the mental eye, as soon as it ceases to be obsessed with the image of the hypothetical ancestral vertebrate, complete with all the characters that a vertebrate "ought" to have. The historical beginnings of vertebrate evolution are suggested in the larval forms of some Ascidians. As to the origin of Ascidians, I am afraid my view of that will give a still greater shock to the orthodox evolutionist. I derive them, and other metazoan phyla,

from plant forms of life. For the slight case I could make for these suggestions out of my slight knowledge of the relevant facts I refer the reader to my *Novius Organum* (Longmans, 1931). My point at present is the general one—the validity of which remains unaffected by the success or failure of my attempts to apply the historical view of organic evolution—that if that view be the true one and the mechanistic view false, the recognition of the fact and the application of the true view can not but give biologists fresh insight into the history of organic evolution just where it is most needed.

I have discussed the principles of biology at some length because they are new and paradoxical and because living things now become our best model for conceiving all things, namely, as relatively free and relatively conditioned. The design of this article forbids even a brief discussion of the consequences of the new concept of nature for the various branches of science on their purely scientific sides. Enough to say that not one of them is yet on its true scientific basis—for how can it be scientific to take fictions for facts? How can science be on its true theoretical basis as long as it must assent to the philosopher's description of it as "useful nonsense"? And it is easy enough to dismiss the nonsense and retain the usefulness.

Modern scientists who think of the matter at all are divided into two schools as to the nature of scientific knowledge. One school holds the traditional scientific view that science seeks and gains a knowledge of the world, of nature, of the real. The other school holds that science can do no more than try to reconcile experiences. Both schools are right and both are wrong. Scientific knowledge is of the real, like experience, and because experience is of the real. On the other hand, the derogatory implication of the word "phenomenal" applies just as much to conceptual as to perceptual knowledge. But too much has been made of the derogatory implication—or rather, the derogatory view has been misapplied. Sense-perception has been slighted by contrast with a supposed deeper insight of the understanding, philosophic or scientific, into reality. There is no such contrast. The understanding is in the same boat with sense-perception as regards reality and the derogatory view would apply to both, if there were any sense in taking it at all now that it is applied to both, as merely virtual imagery, perceptual and conceptual, relative to our sentient and rational nature. But the real contrast is between the subjective view, perceptual and conceptual, of "nature" and the non-subjective view which divines, from the given to awareness and understanding, an Eternal and Infinite Activity in all created things, the

source and real essence of their being. The terms "eternal" and "infinite" have no positive significance; they merely imply that "time" and "space" are notions which do not apply.

It will be observed that the concept of nature as habit is not a metaphysical one, in the usual sense of the word. For it there is scientific knowledge and there is ignorance, the kind of ignorance that is the mother of religion—or, in better order, there is the wisdom that corresponds, for humanity, to the wisdom of the stork in the heavens and there is the knowledge which, without that wisdom, is darkness. Wisdom is matter of ends. Knowledge is of means. Wisdom is best understood either in non-subjective terms: it is what is implied in the "human habit," naturally not in the habit of the "worst" of mankind; or in religious terms: it is "revelation." There is no metaphysical knowledge because, in short, there is no real knowing subject to have it. The "knowing subject" is a hypostatized abstraction. There are men and men are instances of the habit of their kind. It is particularly to be observed that man is not explicable, nor anything else, in terms of evolution; that, as I remarked before, is a naïvety of the scientific understanding. There is no contradiction between the view that morality is the revelation of Divine law and the view that morality is custom, and the first-mentioned is the deeper "truth," is more like the truth—only it does not say anything to the understanding.

I am fortunate in being in agreement with a lively school of philosophy in the view that metaphysics is "bunk." I can also agree with that school, with a qualification, that when scientists begin to ask themselves what precisely they mean by the basic terms of their respective sciences, at that point, in that moment, they become philosophers—a position of logical positivism stated by Mr. Max Black—for that is what happened to me, discontented with the placid acceptance of the "conscious subject" as the basic concept of psychology—or rather, as real. But when Galileo asked himself what precisely the physicists of his time meant by "weight," nothing of the sort happened to him. The qualification I suggest, then, is that the science in question must have achieved its proper basic concepts—what I call its "non-mathematical principles"—and I further suggest that the only true philosophic conclusion from such an inquiry is the impossibility of philosophy. Thus it might have happened to Eddington, asking himself what precisely "gravitation" means, to conclude that it is the name we give to the specific habit of material bodies in their relations to one another and to extend this view to all other things. But it was infinitely easier, of course, in the nature of the respective cases and

in the present state of knowledge, to arrive at the concept of nature as habit by way of asking what precisely the psychologist means by "awareness," "feeling," and "will." Clearly, there is no sense in asking what precisely is meant by "gravitation," "consciousness," etc., when these terms have been accepted as merely descriptive and when the things of which they are descriptive have been merely accepted.

I disagree, then, with the logical analysts in their view that there is a kind of study of language, different from linguistics, which is worthy to be called "philosophy." It seems clear to me that what logical analysts are occupied with is the psychology of "thinking-consciousness," studied in association with a scepticism of earlier views of the thinking-subject, and indeed with the view, I think, that the "thinking-subject" is an abstraction. I can sympathize with their belief that their study is a philosophical one, for I was guilty of a precisely analogous, though inverse, confusion when I began to reflect on sentient behavior in association with a scepticism of the "conscious subject" as a *vera causa.* I thought I was psychologizing when I was really philosophizing on the subject-matter of psychology.

The studies of logical analysts on the talking behavior of men tend, like other behavioristic studies, towards the "philosophy" of nature as habit, but again, it was infinitely easier, in the nature of the respective cases and in the present state of knowledge, to arrive at that "philosophy" by reflection on the behavior of mice than by study of the talking behavior of men. For in spite of the age-old appreciation of the distinction between sense and understanding, there is still no proper appreciation of the distinction in principle between the sentient consciousness of lower vertebrates, shared also by man, and what I call the "sapient" consciousness of man. Still less, naturally, has the psychology of sapience achieved its proper scientific concepts. The reader will acquit me of any animus against scientific fictions when I introduce to him three of my own, corresponding for the psychology of sapience to the awareness, feeling, and will of the psychology of sentience, namely, informedness, affection, and intention.

This is not the place for a discussion of the psychology of sapience, but my discussion of the studies of logical analysts is relevant to my thesis and it is relevant to that to remark that my informedness that "this pen" (with which I am writing) "is red" is an ultimate and mysterious "given" to sapient consciousness, like my awareness of the pen. It does not seem quite so simple and mysterious because it is relatively easy to imagine the history of the development of language and we are apt to think that the his-

torical is intelligible. Similarly, the informedness of the reader, conveyed to him through the printed words, of the color of my pen is an ultimate and mysterious "given"—it is the peculiar character of informedness that "it" (a similar informedness) can be communicated. It is not sense to ask what precisely "this pen is red" (as conveying a common-sense truth) means, any more than it is sense to ask questions about my awareness of the pen. There are rational or sapient organisms, as there are sentient organisms —and non-sentient organisms and material bodies and chemical actions and atoms. These are statements of facts—or rather, of Fact, not phenomenal—which scientists, as such, can only accept and the only way in which they can philosophize about them is to recognize the element of naïve realism in their present understanding of such facts. It is true that a historical account of the evolution of informedness, scientific and otherwise, would deal largely with the evolution of language, but that fact does not give language the importance which logical analysts ascribe to it. The evolution of language follows the evolution of informedness, not *vice versa*. It is also true, presumably, that thinking originated in inter-subjective intercourse, but that does not imply that speech was prior to thought. It merely implies that men thought co-operatively before they thought under their own hats—or rather, co-operatively in bodily presence before co-operatively in the reflection of one on the remembered, written, or printed deliverances of many. Words, names, are much, but they are not the main thing; they are as counters to money, as images to reality, and if the reader objects that some scientific concepts are good "money," as it were, the answer is that we are all acutely conscious to-day that "money" also is counters.

When scientists and philosophers accept the new realism, scientists will be philosophers and philosophers scientists. What sort of scientist the philosopher will be is clear from the basic concepts of human psychology. Logic and epistemology clearly belong to the psychology of informedness, esthetics to that of affection and ethics to that of intention. The fact that these studies are naturally assignable to the three sub-heads of human psychology severally, while truth, beauty, and goodness, as values, also fall naturally under the single head of affection, the subjective aspect of human viability, as feeling is that of lower animal viability, shows both how unitary human consciousness is and how central to it is affection, as feeling is to sentient consciousness. But the scientist-philosopher must be an "applied scientist," an expert about the practice of living, not a theorist about truth, beauty, and goodness. There is no theory of those any more than there is a theory

of "gravitation." A theory of them is not needed, since the good life is lived.

It is easy to see the proper function of philosophy, in the past as well as in the future, by comparison and contrast with that of religion. Religion is the guardian of established values and established social order, philosophy their critic. The condition of human evolution is human freedom and the price of freedom is eternal vigilance. That vigilance on behalf of humanity, as distinct from the vigilance which each individual must exercise for himself to maintain his individual freedom, must be exercised by a special class of men, and philosophers are obviously designated for the function. It is the function which used to be performed by the prophet, the function of being the enemy of the good in the interest of the better. The training of philosophers will be, as before, in scepticism, not of knowledge, but of established values and their actual manifestation in human life. The names of J. S. Mill, Hegel, Marx, Nietzsche, William James, come readily to mind as recent philosophers of this type. The list suggests that God has His false prophets as well as His true ones. There is nothing to be done about that—except to reflect that we deserve the prophets we get and to hope that truth will prevail in the end.

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ANALYSIS OF THE POETIC SIMILE

AS long as we consider along the traditional lines poetic form as something casual or purely ornamental, we shall be unable to grasp the true meaning of the "technique" used by the poet in his creation. Our position will be different and the phenomena of poetic form will become clearer if we shift our basis to a more "natural" standpoint assuming that the poetic form is an organic function of the poetic mind, that consequently all particularities of poetic style or form are not wilfully arranged in order to "please" (since many other things may be done for such a purpose) but that they all are the outward mold of a particular kind of thought which we might call for our convenience the poetic form of thinking. This form of thought runs alongside the other "realistic" or scientific form of thinking like an everywhere discernible streak, a faint rivulet beside the mighty stream of "normal" thinking.

We shall try to define only one, but the most important, feature of this thinking which, as we shall soon discover, is a "symbolic" thinking. We shall analyze the most habitual "figures

of speech" pervading as we know the whole pattern of poetry. The term "figures of speech" is, of course, in itself deceptive, inasmuch as it might suggest something "rhetorical" which as we shall try to demonstrate does not correspond to the facts or rather to the mental process involved in the creation of these figures of speech. They are instead the outward verbal mold of that particular kind of thinking we had previously called poetic or symbolic and we shall see whether this assumption is admissible.

The figures of speech, at least the most important ones, are all rooted in the simile as their basic form. The metaphor, the symbol proper, personifications, etc., are only transformations of the simile, derivatives or abbreviations stemming from a common type of analogy most clearly evolved in the simile. The simile being the main vehicle of poetic thought, it is extremely important to analyze the mental process involved in the simile. Such an analysis may show clearly the "mechanics" of poetic thought.

The poet is recurring to similes in his attempt to "understand" the world or the subjects he is treating instead of proceeding by the habitual and logical way of association which links together factually similar objects (*Ähnlichkeitsassociation*) and then proceeds to ever more embracing notions by abstraction. The simile does not imply that process of association we are accustomed to in normal or scientific thinking. Contrary to the ordinary association wherein we associate the objects according to their real similarity, we shall see that the similarity of the objects in the poetic simile is not real but fictitious when viewed from a realistic (scientific) point of view. These objects of the simile may seem similar if looked upon emotionally but there is no real resemblance at all. The following explanation might bear out this assumption:

The more trivial or simple our example, the easier and the more obvious our line of thought. When the poet compares, for instance, eyes with stars in such a simile "thy eyes are like stars" he is well aware of the fact that there is no real similarity between such widely different objects as eyes and stars are. Nevertheless he associates them in this simile, he "compares" them, for when he is trying to "describe" those eyes his enthusiasm suggests to him the stars as complementary. In reality he does not compare these objects at all. He compares only the impressions which both of them have left in his sensibility. Not the objects themselves but the impressions created in his "feeling" by the "eyes" and "stars" are similar, and that is why he connects these two objects. The link is not factual but emotional. Thus he does not compare two real objects in the outside world but two impres-

sions within himself. In other words the emotional value of the eyes and stars is similar or identical, not their real appearance. A sort of emotional relationship is thus being stated in the simile, not a factual one. He associates these objects or rather their inner mirrors within his sensibility because they possess for him a similar emotional value. Emotion is the source of this specific kind of association. The stars having a similar emotional value thus become the "symbol" of the eyes. In this process the stars are the object-symbol or symbolizing object (*Symbolobjekt*), whereas the eyes are the symbolized object (*das symbolisierte Objekt*), i.e., an object so beset with emotion as to necessitate and to produce an object-symbol as an "explanation." The sensibility aroused by the spectacle of the eyes, or rather their "meaning," settles down to quietude only after having found an object of similar emotional value, the "symbol," as emotional explanation. The explanation is, we must stress this point, not a realistic one but an emotional one.

Every simile has a certain definite "meaning." Let us assume that the poet has compared the "eyes" with "wells." "Thy eyes are like wells." What does he want to "express" by that simile? Does he really mean that eyes physically resemble wells? Not at all. They never do. What he really wants to express is that the eyes are "deep," deep not in a physical sense. Thinking of "depth" he means to say that these eyes inspire him with such a sentiment of awe or fear, bewilderment or respect, as "fathomless" wells might do. They too are "fathomless." The simile is created by the feeling of awe created by both the eyes and the wells. Thus the analogy, the similarity, lies not in the "shape" of the real objects known as eyes and wells but in their kindred emotional function for his sensibility. If the poet wants to express the feelings aroused in his soul by "deep," i.e., mysterious and disquieting eyes, he lacks a proper equivalent in speech in order to express the extent of that depth, he is unable to "tell" it, he is "mute" and in this psychic plight he seeks for the symbolizing object or the symbol which being of similar emotional value serves him thus as an "illustration." All symbols are "illustrations."

Let us analyze the expression "mother earth" wherein the poet compares the earth with a mother. There is again no objective similarity between these objects. The poet wants to express that for his feeling the rôle of the beneficent earth is akin to that of a mother toward her children, etc. The feelings evoked in his sensibility by the "behavior" of the earth towards himself as a human being is sufficiently "explained" if it is "illumined" by the rôle of the mother in her family. The feelings inspired by the

earth are analogous to those inspired by his mother. We might be inclined to say that this expression is "anthropomorphous." But what does that really mean? It is another way of saying that the activities of the earth become clearer to him when he sees it in the "light" of a human being inspiring him with similar feelings. It is an emotional analogy. Unlike the previously mentioned similes we see here the function of a cosmic object (earth) explained by a "family" (mother) whereas we have witnessed previously a human object (eyes) "explained" by a cosmic object (stars). Nevertheless the "mechanics" of the mental process are identical: a thing emotionally "prominent," unexpressed and in need of expression, i.e., of a symbol (*symbolbedürftig*), finds such an expression when another object endowed with similar emotional value, possessing its well-known emotional "meaning," is being fetched and used as an illustration. With the last example the symbol "mother" was a living being. However we should make it clear that whenever the symbol is created, the symbol-object is in fact conceived as an animated entity by the sensibility of its creator. This is the underlying conception in the symbolizing process. It must be presupposed since the stars are fit to inspire "feelings" only when regarded as living beings. Were they not "souls," were they envisaged realistically as mere neuter conglomerations of matter, they would never be able to inspire feelings or to arouse emotions. The creator of the simile or the symbol possesses an animistic conception of the world.

In the metaphor "the blood of grapes," meaning wine, the rôle of the wine, its vivifying power, is explained by comparing the juice of the grape with blood. Blood has an emotional meaning well known to the man who desires to "explain" the wine by blood. Blood is the very substance of life and the wine has an exciting power, it enhances, it increases life. Thus they have the same emotional halo.

We should try to avoid the following mistake which could otherwise easily arise. When seeing the juice of grapes linked with the blood of the human body the superficial observer might be tempted to conclude: since both juice and blood are, or at least might be, "red," it is this element of redness, consequently a material similarity, which determines the simile. This would be entirely mistaken. The redness is purely casual, not necessary. Neither the "redness" of the blood nor the mere "radiance" of the stars nor the outward appearance of the well create any simile. There are many things red and yet they will never become symbols for the juice of grapes in a simile. The "meaning" of the blood and of the juice of grapes or wine makes the simile. Redness might be

a matter of contiguity, it will never be a constitutive element in the symbolizing process. If redness alone were to link these two objects, blood would make a very poor symbol indeed in this simile. The emotional value of the blood illustrating the emotional value of wine creates the simile and appeals to everybody. Without this emotional value the simile would be "dead," cold, "meaningless" and this hidden meaning is the meaning of both objects for our sensibility.

If a poet speaks of the eyes of a man in wrath, "they shone like torches," he compares eyes with torches not because of the factual similarity, but because to human sensibility a burning torch might seem a light "in wrath." Torches burn at funeral processions, in dim churches, on solemn or dreadful occasions. Flickering torches suggest, considering the occasions when they are used, something extraordinary, disquieting, mighty, or alarming. The burning torches and the wrathful unpredictable eyes have a similar emotional halo. Nobody will compare those eyes in that particular moment with candles, not even with big candles; in spite of being "big" they would remain "trivial," inadequate because they have quite a different emotional halo.

The number of objects which may eventually become "symbols" is practically without limit since it is not restricted by the factor of real similarity. Simple contiguity may help to link together the two objects of the simile, however, on one condition: there must be emotional relationship between them should one become the symbol of the other in the simile. "Thy two breasts," says the *Song of Songs,* "are like two young roes." The "roes" are the symbols for "breasts." Breasts may be compared with fruits or leaves or stones or serpents—all this according to the point of view, the emotional point of view, inspiring the poet at a given moment. All of these objects are invested with a different emotional meaning, consequently they are all "potential" symbols, according to a given point of view. Such a casual element of factual similarity as may be found on occasion, is neither necessary nor essential. A kindred emotional halo must surround both: the symbolized object (breasts) and the symbol (roes). If this common emotional halo were lacking, not only would then the symbolizing object be unfit to "symbolize" anything, it would also be unable to evoke the responsive echo in the sensibility of the reader or hearer. They, the audience, would not "understand" the simile, they would not feel its "appeal." If a scientist states that a lion is a sort of cat, everybody will understand it because he will see the common features of their feline character. If on the other hand a poet says that the breasts are like roes, nobody

would be able to grasp the meaning of this analogy, were these two objects not embedded in an identical emotional climate, were they not connected by the same emotional "meaning." The simile would be without emotional "appeal" and hence "void," not understandable.

"Rain" and "tears" have often been compared and in no other language is such a simile more effective than in French due to the additional suggestion of similar sounds in the words "pleurer" and "pleuvoir," i.e., of a natural alliteration wherein to the primitive analogy of sound is added as superstructure the mental alliteration of common emotional meaning of these two words. Such poets as Verlaine will avail themselves of the opportunities inherent in "il pleut" and "il pleure," but everywhere it will often "rain" inside the soul of men and the outside world will "weep." Rain and tears are interchangeable values. The similes are not "telling" because salty water is being compared with sweet water or because both rain and tears may be composed of drops of humidity, but because rain creates sadness in our souls and sadness of soul leads in turn to tears. They are emotionally correlated spheres.

Similes have a great deal of "staying power," i.e., their emotional appeal may last for ages. Nevertheless they are subject to decay, they may fade away. If the emotional conditions of mankind, their conception of life, is entirely changed, some of these similes may become unintelligible. Such a simile as "thy neck is like the tower of David" (*Song of Songs*) requires some measure of historic knowledge should it really be "understood" i.e., "felt." The symbol might even become "dead." If Homer, or whoever it was, calls the goddess Hera "boopis," we might without indulging in such archeological speculations as to whether "boopis" is a petrefact from times when Hera was revered in the shape of a cow or when the cow was perhaps a totemistic animal with the Hellenes, suppose that for the Greeks that expression or symbol of the cow had quite a different appeal than for us. For us the cow symbol is dead in such a connection, it "means" nothing because the emotional halo of the "cow" is entirely altered.

Now what does it really mean when we state that we "understand" a symbol or a simile? We know that we grasp such a symbol by a sort of "intuition," we know what the poet wants to "say." This intuition means simply that the emotional spheres surrounding the symbolized and the symbolizing objects within the sensibility of the poet and his public are identical. Hence the "intuition." It is a result of emotional conformity towards these objects.

In "Guinevere," *Idylls of the King,* Tennyson describes the mood of the Queen approaching on her flight Almesbury her last retreat thus:

> Till in the cold wind that foreruns the morn,
> *A blot in heaven, the Raven, flying high,*
> *Croak'd and she thought, "He spies a field of death;*
> For now the Heathen of the Northern Sea,
> Lured by the crimes and frailties of the court
> Begin to slay the folk, and spoil the land." [Italics mine.]

The stress lies on the second and third strophes. What is their real meaning? The queen sees the shadow of her own death. The raven is the symbol of death; that is in accord with the rôle and the activities of ravens. The raven is concurrently a "blot," a grievous "blot," of course, something distressing. He is a blot in "heaven," but heaven symbolizes the queen's own life, her soul. This raven is a blot in heaven and also a blot in the queen's life, all this meaning that death is a blot in life. She envisages her death, a dreadful blot of her earthly days. And the raven is flying high, death is riding high over the life. We witness different sheaths of meaning in these words; many symbolic meanings are "super-imposed" within these symbolizing objects. Symbols are "polytropic," "multi-faced (*mehrdeutig*). Should we know nothing of Tennyson's convictions or ideas, yet on the basis of this passage we might assume that he considers death as a blot in life. He says it spontaneously and unwittingly and the conclusion is that he was an "optimist." As for the last three strophes we might say that these "Heathen" are here merely inconsequential intruders without deeper meaning. It is a realistic afterthought, a historic reminiscence of the cultured poet. We see instead the terrible raven and even hear him "croak." The croaking is symbolical too; it is the croaking of death. The appeal to the hearing adds to the perfection of the verse and the completeness of the symbolizing process. Symbols appeal generally through the sense of sight, seldom through the medium of other senses. In the last instances, however, and in a simile involving such words as *pleurer* and *pleuvoir* there is at least partially the appeal through the medium of hearing.

It is worth mentioning that the poet compares generally in the simile only one particular emotional aspect of a given object, one emotional facet of a thing with another thing possessing a similar emotional halo so as to be a fitting illustration of that aspect. Comparing eyes with wells the poet is interested in the sole aspect of their depth or mysteriousness. This aspect finds its adequate

expression in the symbol of the well, the common emotional halo being that of something secretive and "bottomless." Comparing radiant eyes with radiant stars there is also one inner aspect of the eyes which causes him to produce the simile, not the physical aspect of radiance, but some such consideration; the skies appear sad, dark, depressing to a human being if not lighted by stars and similarly the world will seem just as depressing to the poet without these eyes. In his life the eyes play the same rôle as the stars in his cosmos, both of them "brighten" his outlook. This particular meaning of the eyes as a brightening element finds its expression in the symbol of the star, the emotional meaning for his human feeling being analogous.

This poetic trend of associating things of similar emotional value is basically different from the scientific or realistic way of classification and grouping of really similar objects. The poetic way of association and "explanation" will logically never lead to any consistent system of knowledge. This is, of course, not its psychical purpose. It has different aims. The symbols thus created by the poetic mind lie scattered and can never be coördinated or integrated in any system at all. The poetic form of "explanation" is moreover, as history proves it, a more "ancient" form of explanation, the cosmogonies and mythologies of antiquity abounding with these forms of "explanation." It is an emotional analogy consisting of a process wherein two objects possessing a similar emotional value for human feeling or, more exactly, two kindred emotional halos are compared within the sensibility. It is an "ancient" form of thought and the poet "reverts" to it when affected by emotion. Whenever an object has acquired an emotional value for the poet, his mind will seek an object of similar emotional value as "explanation." This poetic "technique" of thought is universal. Tennyson will resort to it just as the author of the *Song of Songs* or the bard of the Homeric songs. It arises independently in quite distant areas and at all times. It is spontaneous and natural, not deliberate. Nor is it confined to "poetry" alone. If lovers swept by emotions utter expressions of fondness, they will "revert" to the same techniques. They too create similes but their symbols lack "originality," they repeat themselves. Even if people in wrath call themselves "names," they may recur to this technique. Symbols are born of an emotional analogy.

What is to be gained by this analysis? It places the phenomena of poetic thought and creation in their proper position in revealing their character as resulting from a natural trend of thought impregnated with emotion. Thus these phenomena cease being

inexplicable marvels of an obscure "imagination" and are traced back to their common emotional origin.

MAX RIESER.

NEW YORK CITY.

BOOK REVIEW

A History of Esthetics. KATHARINE EVERETT GILBERT and HELMUT KUHN. New York: The Macmillan Company. 1939. xx + 582 pp. $4.25.

A proper equipment for a historian of esthetics includes an acquaintance with two quite different though related fields of scholarship: the history of philosophy and the history of the fine arts. It includes two different but complementary kinds of expertness and sensibility: with respect to the subject-matter and technique of the arts themselves and with respect to the dialectic of philosophical argument. Nothing less will enable the historian to treat the history of esthetics fruitfully. Bosanquet's *History of Aesthetic,* long the only general book in its field, suffered from the fact that it was written in terms of a succession of esthetic theories abstracted from their context and their subject-matter. In reading it one forgot that esthetic theory was a generalized consideration of art and our experience of it. The book, moreover, was heavily weighted on the side of the idealistic tradition of its author.

Professor Gilbert and Professor Kuhn have written a history of esthetics which—to use a well-worn phrase that I wish might sound as fresh as it is in this instance accurate—fills a long-felt need. Every page bears witness to their taste, their sensibility, and their sense of the proportion of esthetic theory to esthetic facts. Even on familiar figures like Plato, Aristotle, and Plotinus, there is new light shed. The kind of light shed is suggested by the following sentences from the authors' preface.

> Behind St. Augustine was a decaying Pythagoreanism baptized and given second birth by Christianity. Behind William Blake was weariness of mathematical science and thirst for exuberance and flowing energy. . . . The esthetic abstractions in the idealistic German movement of the early nineteenth century . . . took on indeed an altogether more becoming complexion, when the same abstract terms—absolute, unity, synthesis—were found in the unoffending love-letter literature of the time. [Pp. ix–x.]

The origins and sources of Platonic ideas are shown in the Pythagorean doctrine of cosmic harmony, in Sophistic rhetoric and ideas of art, in the current Greek notions of art as skill. Plotinus's mystical Platonism is given its context in the rhetorical discriminations, the mystery religions, the revolt from worldliness, and the

encyclopedism substituted for speculative wholeness characteristic of his time. And, to jump across the centuries, the "Eighteenth-Century British School" is related to its sources in Locke, in French "reason," and in the "gracious reasonableness" of the eighteenth-century arts.

But the book is valuable and fresh not simply in its treatment of the conditions of artistic practice and the social patterns out of which particular esthetic speculations grow and of which they are the intellectual formulation or against which they formulate revolt. The narrative treats analytically the theories themselves. Aristotle's *Poetics* is given a fresh and responsible statement. Nothing could be neater or truer than that for Aristotle the "form of art is the matter of pleasure," or that the theatre-goer's feeling as aroused and absorbed by a tragedy is "shaped rational emotion."

The treatment of medieval esthetics seems to this reviewer a particularly useful handling of an almost impossibly large subject-matter and one whose terms at once demand translation into a more familiar idiom and yet are in danger of losing their force and point in translation. There is also the danger that medieval "esthetics" be treated as exclusively metaphysics, logic, or theology. Mrs. Gilbert (for this chapter is one of the predominant number written exclusively by her) manages, with respect to medieval theory, and especially with respect to St. Augustine, to show how that philosopher, while condemning art as deception, by an "involved dialectic" found it served and revealed God, of whom it was "a name." The beholding of art was a beholding of Form, and thus of Being. Art was a way *of* contemplation and a way *to* blessedness. Professor Gilbert has crowded into her pages—without crowding—exactly the issues in medieval thought that are raised by the question: Is there a medieval esthetics?

The fresh note in the treatment of the Renaissance is in breaking down the conventional contrast between medieval and Renaissance thinking on art. The really new note in the Renaissance Mrs. Gilbert identifies suggestively. Esthetic thinking was influenced directly by one fact above all:

> . . . the graduation of painting and poetry from the class of humble crafts to that of liberal professions. This change is illustrated by Alberti's (1404–1472) essay on painting, written, as he declared, to raise this art above its lowly status of craft to a position of defender and exponent of contemporary thought. [P. 166.]

Mrs. Gilbert can not say all about the Renaissance theories of beauty, but what she chooses is crucial. And so throughout.

There is naturally, in the less than six hundred pages, considerable compression, so that occasionally, as in the chapters on German romanticism and romantic ideas, the authors are reduced to names and formulas. But the remarkable nature of their achievement is the vital sense they give to theories by placing them in terms of their environment, their tradition, and the arts over which the formulas hovered, and which lent them their richness of meaning. This tribute must be qualified as to the closing chapters, where a verbal unity only is achieved through such titles as "Esthetics in the Age of Science," "Society and the Artist." "Esthetics in Our Time" is hardly more than an index.

One must add that the book is marked by a warmth which does not distort the cool analysis, and by graciousness without prettification. The book will be invaluable to all students in esthetics, and makes available a learning and an insight that a source-book would not have quite conveyed. But a little more extensive quotation would have made this brilliant account even more useful than it is. There is a helpful students' bibliography.

IRWIN EDMAN

BOOK NOTES

The Logic of Language. JAMES MACKAYE. Hanover, N. H.: Dartmouth College Publications. 1939. 303 pp. $3.50.

This is a posthumous work, constituting the first of a contemplated three-volume treatise entitled "Reason" whose three parts were to deal with Intelligibility, Probability, and Utility, respectively. At the time of his death in 1935, Professor MacKaye had completed the first part, and left a rough draft of the second and notes for the third. The present volume, containing this completed portion, includes a Foreword by Professor William P. Montague, a Preface by Dr. Albert W. Levi, one of Professor MacKaye's literary executors, and an Appendix listing Professor MacKaye's publications as compiled by Mrs. MacKaye.

The present volume offers ample evidence for the many-sidedness of Professor MacKaye's interests, and testifies to his passionate zeal for clarity and intellectual integrity. Professor Montague points out that Professor MacKaye was vitally concerned with problems of ethics and social theory (he was a utilitarian and a liberal socialist) as well as with problems of natural science and logic; and Dr. Levi notes that the present treatise was intended as a contribution to obtain intelligent communication between men outside of academic halls, and not simply to technical philosophy.

The argument and illustrations of this book are in keeping with these inclusive interests of Professor MacKaye. Its primary stress is placed upon the nature and function of definition, and perhaps its chief burden is the citation and examination of an impressive variety of confusions whose source is located in terminological ambiguities or in failures to distinguish between definitory and material propositions. The importance of paying attention to language is fully established—even if some of Professor MacKaye's specific analyses remain questionable, for example, his view that the Lobachevskian geometry differs from that of Euclid only as a German translation of Euclid differs from that of a French one. The penultimate chapter considers "the nature of the nature of things," and argues effectively that "the nature of a thing" is simply the conventional connotation of the name of that thing, so that the age-old controversy on that subject arises from confounding definitory and material propositions. The final chapter is devoted to the analysis of the nature of existence, and in terms of distinctions between personal and impersonal existence and phenomenal and noumenal existence Professor MacKaye attempts to adjudicate the realist-idealist controversy. Although some of these distinctions (especially that between phenomenal and noumenal existence) raise problems not adequately disposed of in the present volume, the discussion is a brave attempt to see clearly what sort of issues are involved in a hoary philosophical debate.

E. N.

Man the Measure: An Essay on Humanism as Religion. ARTHUR HAZARD DAKIN. Princeton, New Jersey: Princeton University Press. 1939. xiii + 284 pp. $3.00.

This is a work of religious controversy dealing with the confusing issue of humanism *versus* humanism, in which a theistic pupil of Paul Elmer More and Clement C. J. Webb attempts to expose the inconsistencies and inadequacies of left-wing Unitarian humanism. Mr. Dakin makes the task of exposing contradictions an easy one by the simple expedient of lumping together copious excerpts from the sermons of muddled preachers and serious passages from the works of philosophers like Dewey, Hartmann, and Sellars. As for "adequacy," he concludes his book: "In spite of excellent features, humanism fails to appreciate fully facts and experiences leading to the idea of God and to communion with Him. For that reason alone—even were it otherwise satisfactory —humanism cannot carry out its promise to fill the place of God and theistic religion." In other words, like most theists, he misses

completely the vital distinction between those humanists who retain the demands of traditional religion, offering humanism as a substitute, and those who renounce many of the demands, contenting themselves with what to more romantic appetites appears of course inadequate. Mr. Dakin's real service is in pointing out the limited, middle-class character of American humanism in the early thirties, and the logical feebleness of most of its propaganda against theism. But the stronger his case on these scores, the weaker becomes the claim of his book to religious, much less to philosophical, importance.

H. A. L.

Dall' uomo a Dio. A cura di Enrico Castelli e Giulio Alliney. Bernardino Varisco. (Pensiero e Civiltà. Biblioteca di Cultura, Studi e Ricerche I.) Padova: Cedam. 1939. 384 pp. 40 l.

Varisco may be regarded as the grand-old-man of Italian contemporary philosophy, whose system of thought is worthy of comparison with Croce's and Gentile's. The above volume, published posthumously, is the last of his works, and its definitive character is important, because as an old Italian proverb puts it: You can not judge a man until he is dead. Particularly is this the case with Varisco, whose plastic mind in its long career subtly reveals the influences of different intellectual climates.

According to the author, *the* fundamental problem of philosophy is the problem of theology. This problem is concerned with "the relations between man and God." There are only three possible doctrines concerning this problem. The first is the doctrine of pantheism or *l'immanentismo assoluto* found in idealism; the second is the doctrine of traditional theism or *il trascendentalismo assoluto* found in positive religion; and the third is the doctrine of a reformed theism or *il trascendentalismo relativo* defended in this book (p. 92).

Varisco arrives at his conception of God by a critical analysis of human experience in both its cognitive and moral forms. Experience is "pregnant with rationality" or order. In Kantian terminology, consciousness and conscience (the Italian word *"coscienza"* has both meanings) require for their intelligibility an *a priori* factor, which is not inferred from experience, but rather is the very condition of its possibility. This *a priori* is God, in whom "we live and move and have our being." God must be in order to justify the ways of man. God as the Transcendental or Universal Subject must exist as transcendent to all single sub-

jects and yet partly immanent in each and all of us, in the same way as each individual is partly transcendent and partly immanent in all others.

There are several reasons for the author's choice of the theistic hypothesis rather than the pantheistic one of idealism. In the first place, while reality in its entirety must be absolutely transparent to God as his creation, this state of affairs is not the case with each single subject. In the second place, while God is free from error, each single subject everywhere manifests its taint. And finally, while God is completely self-conscious, there is not a human subject whose life is not inevitably and largely subconscious. When man forgets, God always remembers. God is the guarantee that things forgotten by man are not gone forever. All these reasons lead to Varisco's conclusion that "God is more than man" (p. 165). The presence of God in human experience does not imply the absence of God outside of human experience. To propose that God is exhausted by human experience, and therefore not independently real, is to approach the Hegelian night in which all the cows are black.

The author vigorously claims that the argument for the existence of God contained in his "hypothesis of relative transcendentalism" is both "essential to thought" and "sufficiently novel" to avoid the criticisms against the traditional arguments (p. 101). However, suppose we grant that the complete meaning of reality seems to imply a Universal Subject or God, is one justified in claiming that such a God is an actuality that exists rataher than a possibility that subsists?

PASQUALE ROMANELLI.

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OTHER NEW BOOKS AND JOURNALS

Marcault, J. E., et Brosse, Thérèse: L'éducation de demain. La biologie de l'esprit et ses applications pédagogiques. Paris: Félix Alcan. 1939. xi + 305 pp. 40 fr.

Åkesson, Elof: The Tacit Assumptions of Swedish Social Life. Lund: C. W. K. Gleerup. 21 pp.

Guillaume, P.: La psychologie animale. Paris: Armand Colin. 1940. 210 pp. 15 fr.

THE PHILOSOPHICAL REVIEW. Vol. XLIX, 2. Recent Shifts in Ethical Theory and Practice: *Jay William Hudson.* Philosophy and Natural Science: *C. J. Ducasse.* Human Nature and the Present Crisis: *Edward O. Sisson.* Proceedings of the American Philo-

sophical Association. A Symposium—Some Difficulties in Dewey's Anthropocentric Naturalism: *M. R. Cohen.* Dewey's Concepts of Experience and Nature: *W. E. Hocking.* Nature in Experience: *John Dewey.*

JOURNAL OF SYMBOLIC LOGIC. Volume 5, Number 1. Einkleidung der Mathematik in Schröderschen Relativkalkul: *Leopold Löwenhein.*

GIORNALE CRITICO DELLA FILOSOFIA ITALIANA. Anno XXI, Fasc. 1. La psicologia del Telesio: *A. Corsano.* Riformatori ed eretici italiani del secolo XVI (continua): *Giorgio Radetti.* Il comando supremo. Idee d'un filosofo naturalista: *Leonardo Grassi.* Idealismo e immanentismo (Postille a una metafisica dell'esperienza: *Cesare Luporini.* Varianti all'Ecloga latina di Tommaso Campanella: *Luigi Firpo.*

NOTES AND NEWS

We have received the program of the Forty-first Annual Meeting of the Western Division of the American Philosophical Association, which will be held at Ohio State University, April 25, 26, and 27, 1940.

THURSDAY, APRIL 25

The meeting will start with concurrent sessions in the afternoon. Section A will be a round-table discussion of "The Rôle of Philosophy in Institutions of Higher Learning." A committee under the chairmanship of Charles M. Perry will report on the recent questionnaire. Discussion will follow and appropriate recommendations will be considered.

In Section B, there will be discussion of papers in ethics and social philosophy. The papers are reproduced in full in the program, entitled as follows: "The Philosophical Itinerary from Manfred to Faust" by L. W. Elder; "Beyond Compromise" by Oliver Martin; "The Invisible Hand" by Laurence Sears; "Virtue is Knowledge" by H. S. Fries. Discussion by A. E. Avey, Maurice Baum, A. R. Chandler, W. A. R. Leys, P. B. Rice, A. C. Garnett.

FRIDAY, APRIL 26

In the morning there will be a general session at which the following papers will be read: "Philosophical Nonsense" by A. E. Murphy; "How Empirical is the Contemporary (Berkeleian) View of Experience?" by John Wild; "Ethical Relativism" by Morris R. Cohen.

In the afternoon two concurrent sessions are scheduled. In Section A there will be a discussion of the topic "The Nature and Function of Theory in Ethics, and the Criteria for Choice between Ethical Theories" by Virgil Aldrich, C. J. Ducasse, G. R. Geiger, C. T. Howell, H. D. Roelofs, H. N. Wieman. For Section B a paper "On Natural and Conventional Symbols" by C. H. Langford is printed in the program and will be discussed by A. C. Benjamin, M. H. Fisch, Paul Henle, C. H. Langford.

At the annual dinner the presidential address will be delivered by Glenn R. Morrow on the subject "Plato and the Rule of Law."

SATURDAY, APRIL 27

Two concurrent sessions are scheduled. In Section A papers will be read on the philosophy of E. Jordan as follows: "Jordan's Analysis of the Legislative Process" by Glenn Negley; "Jordan's Theory of the Corporate Will" by E. T. Mitchell; "Jordan's Aesthetic Theory" by R. A. Tsanoff.

In Section B there will be discussion of the following papers which are printed in full in the program: "The Nature of Causal Scepticism" by J. R. Weinberg; "Plotinus' Theory of Imagination" by G. H. Clark; "Platonism in the Midwest" by P. R. Anderson; "Absolute Value as Autonomous Form" by John S. Marshall; "A General Theory of Curriculum" by J. A. Lynch. D. L. Evans, W. S. Gamertsfelder, Marjorie Grene, A. R. King, M. H. Moore, C. P. Osborne will take part in the discussion of these papers.

The Conference on Methods in Philosophy and the Sciences will meet on April 28, 1940, at the New School for Social Research, New York City. The subject of the symposium will be: "Theory and Data in Inquiry." Professor Selig Hecht will speak on "Some Adventures with the Weber-Fechner Law"; Dr. Gregory Bateson will discuss "Experiments in Thought on Observed Ethnological Material in Bali and New Guinea"; and Professor Harold Lasswell will present a study of "Developmental Thinking in Political Analysis."

Address inquiries to the Secretary of the Conference on Methods in Philosophy and the Sciences, New School for Social Research, 66 West 12th Street, New York City.